



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/803,945

03/19/2004

Kenichi Shimooka

TSM-37

7176

24956 7590 08/19/2008
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

PERUNGAVOOR, VENKATANARAY

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,945	Applicant(s) SHIMOOKA ET AL.	
	Examiner Venkat Perungavoor	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,9-11,14-17,19,22,24,26,28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,9-11,14-17,19,22,24,26,28-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/23/2008 have been fully considered but they are not persuasive.

Applicant's arguments, see pages 10-15, filed 6/23/2008, with respect to the rejection(s) of claim(s) 7,9-11, 14-17, 19, 26, 28-29 under 35 USC § 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of US Patent 2001/0028714 to Ogino et al.(hereinafter Ogino).

Another argument that the applicant makes is that the Office has failed to show path disconnection unit.

Hickman discloses the state when the mirroring occurs and times where mirroring is postponed during which time the path is disconnected see Par. 0031. And further discloses the restoring mirroring and re-synchronizing see Par. 0035.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2132

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 9-11, 14-17, 19, 21, 24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication 2003/0135783 to Martin et al.(hereinafter Martin) in view of US Patent 2001/0028714 to Ogino et al.(hereinafter Ogino).

Regarding Claim 7, 10-11, 14, Martin discloses the computer system including a host computer coupled to and separate from a storage system which has a first volume(Fig. 2 item 206) for storing data received from the host computer and a second volume(Fig. 2 item 210) that is a pair of said first volume and that stores data that is replicated from said first volume, and a storage control unit(Fig. 2 item 204) for controlling the data replication from the first volume to said second volume, a data protection apparatus coupled to and separate from the host computer and the storage system, comprising: an event detection unit(Fig. 22 item 2204) for detecting an event occurrence see Fig. 23; a replication stopping unit(Fig. 2 item 202) for instructing said storage control unit to stop the replication of data of said first volume to said second volume, when said event detection unit detects an event see Par. 0043. But Martin does not explicitly disclose a stopping unit. However, Ogino discloses the replication stopping unit instructs said storage control unit to stop the data replication from said first volume to said second volume when said event detection unit receives an event detection of an illegal intrusion from an illegal intrusion detection unit, in the host computer, which detects the illegal intrusion(Par. 0100) into said host computer see Fig. 2 item 4 & Par. 0032 & Par. 0098. It would be obvious to one having ordinary skill in the art at the time of the invention to

include a replication stopping unit in the invention of Martin in order to prevent illegal copying of data as taught in Ogino see Par. 0121.

Regarding Claim 9, 19, 21, 24, 26 Martin discloses the virus detecting unit detecting the virus and the event detection unit(MIA) receives this notice and stops the replication see Par. 0043 & Par. 0095.

Regarding Claim 15, Martin discloses the time factor involved in replication see Fig. 5.

Regarding Claim 16-17, Martin discloses the volumes of storage units see Fig. 4.

Regarding Claim 29, Martin discloses the delaying of replication after writing from host computer to first volume see Par. 0053 & Par. 0054(incremental backups-forward and backward).

Claims 22-23 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication 2003/0135783 to Martin et al.(hereinafter Martin) in view of US Patent 2001/0028714 to Ogino et al.(hereinafter Ogino) and further in view of US Patent Publication 2004/0236907 to Hickman.

Regarding Claim 22-23, 25, 27-28, Martin does not explicitly disclose the stopping by disconnection of path and canceling of data. However, Hickman discloses the stopping

by disconnection of path and canceling of data see Fig. 2 & Par. 0076. It would be obvious to one having ordinary skill in the art at the time of the invention to include the stopping by disconnection of path and canceling of data in the invention of Martin in order to have a parallel process as taught in Hickman see Fig. 2.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkat Perungavoor whose telephone number is (571)272-7213. The examiner can normally be reached on 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto

Art Unit: 2132

Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./

Examiner, Art Unit 2132

July 30, 2008

/Benjamin E Lanier/

Primary Examiner, Art Unit 2132